IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:	Stephen A. Tarin	Confirmation No.: TBA
Serial No.:	DIV of 09/412,158	Art Unit: 2172
Filed:	herewith	Examiner: Shahid Al Alam
For:	VALUE-INSTANCE-CONNECTIVITY COMPUTER-IMPLEMENTED DATABASE	Attorney Docket No.: 8676-042

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure provisions of 37 C.F.R. §1.56, there is hereby provided certain information which the Examiner may consider material to the examination of the subject U.S. patent application. It is requested that the Examiner make this information of record if it is deemed material to the examination of the application.

1. Enclosures accompanying this Information Disclosure Statement are:

   1a. ☒ A list of all patents, publications, applications, or other information submitted for consideration by the office.

   1b. A legible copy of :

   ☐ Each U.S. patent application publication and U.S. and foreign patent;

   ☐ Each publication or that portion which caused it to be listed on the PTO-1449;

   ☐ For each cited pending U.S. application, the application specification including the claims, and any drawing of the application, or portion of the application which caused it to be listed on the PTO-1449 including any claims directed to that portion;

   ☐ all other information or portion which caused it to be listed on the PTO-1449.

   1c. ☐ An English language copy of search report(s) from a counterpart foreign application or PCT International Search Report.

   1d. ☐ Explanations of relevancy (ATTACHMENT 1(d), hereto) or English language abstracts of the non-English language publications.

2. ☒ This Information Disclosure Statement is filed under 37 C.F.R. §1.97(b):

   ☒ Within three months of the filing date of a national application other than a continued prosecution application under §1.53(d);

   ☐ Within three months of the date of entry of the national stage as set forth in §1.491 in an international application;

☐ Before the mailing of the first Office action on the merits;

☐ Before the mailing of a first Office action after the filing of a request for continued examination under §1.114.

3. ☐   This Information Disclosure Statement is filed under 37 C.F.R. §1.97(c) after the period specified in 37 C.F.R §1.97(b), but before the mailing date of any of a final action under 37 C.F.R. §1.113, a notice of allowance under 37 C.F.R. §1.311 or an action that otherwise closes prosecution in the application.

(Check either Item 3a or 3b)

3a.   ☐   The Certification Statement in Item 5 below is applicable. Accordingly, no fee is required.

3b.   ☐   The $180.00 fee set forth in 37 C.F.R. §1.17(p) in accordance with 37 C.F.R. §1.97(c) is:
☐ enclosed
☐ to be charged to Pennie & Edmonds LLP Deposit Account No. 16-1150.

(Item 3b to be checked if any reference known for more than 3 months)

4. ☐   This Information Disclosure Statement is filed under 37 C.F.R. §1.97(d) after the period specified in 37 C.F.R. §1.97(c), but on or before the date of payment of the issue fee.

The $180.00 fee set forth in 37 C.F.R. §1.17(p) is:
☐ enclosed.
☐ to be charged to Pennie & Edmonds LLP Deposit Account No. 16-1150.

The Certification Statement in Item 5 below is applicable.

5. ☐   Certification Statement (applicable if Item 3a or Item 4 is checked)

(Check either Item 5a or 5b)

5a.   ☐   In accordance with 37 C.F.R. §1.97(e)(1), it is certified that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.

5b.   ☐   In accordance with 37 C.F.R. §1.97(e)(2), it is certified that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned after making reasonable inquiry, was known by any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

6. ☒   This application is a continuation application under 37 C.F.R. §1.60 or §1.53(b) or (d).
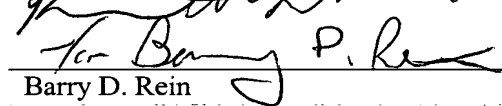
(Check appropriate Items 6a, 6b and/or 6c)

6a.   ☐   A Petition to Withdraw from issue under 37 C.F.R. §1.313(b)(5) is concurrently filed herewith.

-2-

6b. ☒ Copies of publications listed on Forms PTO-1449 or PTO-892 from prior application Serial No. 09/412,158, filed on October 5, 1999, of which this application claims priority under 35 U.S.C. §120, are not being submitted pursuant to 37 C.F.R. §1.98(d).

6c. ☐ Copies of the publications listed on Form PTO-1449 that were not previously cited in prior application Serial No.   , filed on   , are provided herewith.

7. ☐ This is a Supplemental Information Disclosure Statement. (Check Item 7a)

7a. ☐ This Supplemental Information Disclosure Statement under 37 C.F.R. §1.97(f) supplements the Information Disclosure Statement filed on   . A bona fide attempt was made to comply with 37 C.F.R. §1.98, but inadvertent omissions were made. These omissions have been corrected herein. Accordingly, additional time is requested so that this Supplemental Information Disclosure Statement can be considered as if properly filed on   .

8. ☐ In accordance with 37 C.F.R. §1.98, a concise explanation of what is presently understood to be the relevance of each non-English language publication is:

(Check Item 8a, 8b, or 8c)

8a. ☐ satisfied because all non-English language publications were cited on the enclosed English language copy of the PCT International Search Report or the search report from a counterpart foreign application indicating the degree of relevance found by the foreign office.

8b. ☐ set forth in the application.

8c. ☐ enclosed as an attachment hereto.

9. ☒ The Commissioner is authorized to charge any additional fee required or credit any overpayment for this Information Disclosure Statement and/or Petition to Pennie & Edmonds LLP Deposit Account No. 16-1150.

10. ☒ No admission is made that the information cited in this Statement is, or is considered to be, material to patentability nor is a representation made that a search has been made (other than a search report of a foreign counterpart application or PCT International Search Report if submitted herewith). 37 C.F.R. §§1.97(g) and (h).

Respectfully submitted, _(Reg. No. 38,704)_

Date: July 28, 2003

22,411

Barry D. Rein   (Reg. No.)
PENNIE & EDMONDS LLP
1155 Avenue of the Americas
New York, New York 10036-2711
(212) 790-9090

LIST OF REFERENCES CITED BY APPLICANT
(Use several sheets if necessary)

ATTY DOCKET NO. 8676-042	APPLICATION NO TBA
APPLICANT Stephen A. Tarin	
FILING DATE herewith	GROUP 2172

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A01	6,018,734	01/25/00	Zhang *et al.*			
	A02	6,006,219	12/21/1999	Rothschild			
	A03	5,983,232	11/09/99	Zhang			
	A04	5,966,709	10/12/99	Zhang *et al.*			
	A05	5,918,225	06/29/1999	White et al.			
	A06	5,838,965	11/1998	Kavanagh *et al.*			
	A07	5,797,136	08/1998	Boyer *et al.*			
	A08	5,794,229	08/11/1998	French et al.			
	A09	5,713,014	01/27/98	Durflinger *et al.*			
	A10	5,701,461	12/1997	Dalal *et al.*			
	A11	5,692,178	11/1997	Shaughnessy			
	A12	5,675,779	10/07/1997	Doktor			
	A13	5,649,181	07/15/97	French *et al.*			
	A14	5,611,076	03/11/97	Durflinger *et al.*			
	A15	5,592,667	01/07/97	Bugajski			
	A16	5,560,006	09/24/96	Layden *et al.*			
	A17	5,555,388	09/1996	Shaughnessy			
	A18	5,546,575	08/13/1996	Potter et al.			
	A19	5,495,608	02/27/96	Antoshenkov			
	A20	5,414,834	05/09/95	Alexander *et al.*			
	A21	5,412,797	05/02/95	Rubin			
	A22	5,276,868	01/04/94	Poole			
	A23	5,201,046	04/06/93	Goldberg *et al.*			
	A24	5,010,478	04/23/91	Deran			
	A25	4,858,146	08/1989	Shebini			
	A26	4,479,196	10/23/84	Ferrer *et al.*			
	A27	4,468,732	08/28/84	Raver			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	B01							
	B02							

OTHER REFERENCES *(Including Author, Title, Date, Pertinent Pages, Etc.)*

C01	"ERDB Entity-Relation Database," ERDB Website and ERDB Manual, www.ataindy.com, copyright 1998, Automated Technology

		Associates
	C02	"Monet Source Code," dated Jan. 8, 1996, as appears on www.cwi.nl/~monet/srcdoc.html as of Feb. 5, 1999
	C03	"Monet Performance," www.cwi.nl/~monet/performance.html, last modified Sept. 20, 1995
	C04	Boncz et al., "The Drill Down Benchmark," www.cwi.nl/~monet/papers.html, appears in Proceedings of the 24th VLDB Conference New York, USA, 1998
	C05	Boncz et al., "Flattening an Object Algebra to Provide Performance," www.cwi.nl/~monet/papers.html, appears in 14th International Conference on Data Engineering, Feb. 23-27, 1998, Orlando, Florida, USA
	C06	Boncz et al., "Monet and Its Geographic Extensions: a Novel Approach to High Performance GIS Processing," as appears on www.cwi.nl/~monet/papers.html as of Feb. 5, 1999
	C07	Boncz et al., "Monet An Impressionist Sketch of an Advanced Database System," www.cwi.nl/~monet/papers.html, appears in Basque International Workshop on Information Technology, Data Management Systems, San Sebastian, Spain, July 19-21, 1995
	C08	van den Berg et al., "Monet Meets OO7," Nov. 3, 1995, as appears on www.cwi.nl/~monet/papers.html as of Feb. 5, 1999
	C09	Kersten et al., "A Data Cube Algebra Engine for Data Mining," as appears on www.cwi.nl/~monet/papers.html as of Feb. 5, 1999
	C10	van den Berg, "Dynamic Query Processing in a Parallel Object-Oriented Database System," Ph.D. Thesis, published at CWI, 1994, as appears on www.cwi.nl/~monet/papers.html as of Feb. 5, 1999
	C11	van den Berg et al., "Analysis of a Dynamic Query Optimization Technique for Multi-Join Queries," as appears on www.cwi.nl/~monet/papers.html as of Feb. 5, 1999
	C12	Angara website, www.angara.com, copyright 1998, Angara Database Systems, Inc.
	C13	Cache website, www.intersys.com, copyright 1996, 1997, 1998, InterSystems Corporation
	C14	"The Dali Main-Memory Storage Manager," Dali website, www.bell-labs.com/project/dali, copyright 1996, as appears on the website as of Feb. 5, 1999
	C15	Jagadish et al., "Dali: A High Performance Main Memory Storage Manager," www.bell-labs.com/project/dali, appears in Proceedings of the 20th VLDB Conference Santiago, Chile, 1994
	C16	Bohannon et al., "Recoverable User-Level Mutual Exclusion," as appears on www.bell-labs.com/project/dali as of Feb. 5, 1999
	C17	Bohannon et al., "Logical and Physical Versioning in Main Memory Databases," www.bell-labs.com/project/dali, appears in Proceedings of the Conference on Very Large Database, 1997
	C18	"Times Ten Performance Software," Times Ten website, www.timesten.com, copyright 1997, 1998
	C19	"Titanum Database Engine Technical Synopsis" copyright 1998, Micro Data Base Systems, Inc.
	C20	Herrin et al., "Schema and Tuple Trees: An Intuitive Structure for Representing Relational Data," www.hsdi.com/qddb/article2, appears in Computing Systems, vol. 9, no. 2, copyright 1996 by the USENIX Association
	C21	Herrin et al., "An ASCII Database for Fast Queries of Relatively Stable Data," www.hsdi.com/qddb/article2, appears in Computing Systems, vol. 4, no. 2, copyright 1991 by the Regents of the University of California
	C22	Date, C. J., "An Introduction to Database Systems," 3rd Ed., pp.33-61, Addison-Wesley Publishing Company
	C23	Date, C.J., August, 1995, "An Introduction to Database Systems," 6th Ed., pp. 1-51, 710-760, Addison-Wesley Publishing Company
	C24	Batory, D.S., "On Searching Transposed Files," ACM TRANSACTIONS ON DATABASE SYSTEMS, vol. 4, no. 4, December 1979, pp. 531-544
	C25	Batory et al., "A Unifying Model of Physical Databases," ACM TRANSACTIONS ON DATABASE SYSTEMS, vol. 7, no. 4, December 1982, pp. 509-539
	C26	Eggers et al., "Efficient Access of Compressed Data," IEEE, 1980, pp. 205-211
	C27	Eggers et al., "A Compression Technique for Large Statistical Databases," IEEE, 1981, pp. 424-434
	C28	Valduriez, P., "Join Indices," ACM TRANSACTIONS ON DATABASE SYSTEMS, vol. 12, no. 2, June 1987, pp. 218-246
	C29	Olken et al., "Rearranging Data to Maximize the Efficiency of Compression," ACM, 1986, pp. 78-90

EXAMINER	DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with **MPEP 609**; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.